a^2

--Fig. 2 shows the manner in which the guide carriage 1 is machined with a grinding wheel 18. The axis of rotation 19 of the grinding wheel 18 is situated outside of the guide carriage 1 and is disposed at an acute angle α to the axis of symmetry 20 of the guide carriage 1.

The acute angle α that the axis of rotation 19 of the grinding wheel 18 forms with the axis 20 of symmetry of the guide carriage 1 is about 15°.

This permits a simultaneous grinding both of the raceway 10 situated nearer the U-crossbar 5 and the raceway 11 situated further away from the U-crossbar 5 of the inner surface of one of the U-legs 6 using one part of the grinding wheel 18 and, at the same time, a grinding of the stop surface 12 on the outer surface of the other U-leg 6 using another part of the grinding wheel 18. To enable a part of the grinding wheel 18 to be inserted into the carriage cavity 7 and grind the raceways 10 and 11, both the raceways 11 of the guide carriage 1 situated further away from the U-crossbar 5 end at an imaginary connecting plane 21 that extends through the centers of the load-bearing balls 3 circulating on the raceways 11 and limits the two U-legs 6 on their undersides.--

REMARKS

Reconsideration of this application is requested in view of